



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/023,440 | 12/14/2001 | Michael S. Zaharkin | 962.007US1 | 2301 |

21186 7590 09/06/2007
SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER

BASHORE, WILLIAM L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2176

| MAIL DATE | DELIVERY MODE |
|-----------|---------------|
|-----------|---------------|

09/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/023,440

Applicant(s)

ZAHARKIN, MICHAEL S.

Examiner

William L. Bashore

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23,29,31 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) 11,12,16-23,29,31 and 35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8,13 and 15 is/are allowed.
- 6) ☒ Claim(s) 9,14,33 and 34 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: pre-appeal conference request filed 4/5/2007, to the original application filed 12/14/2001, PCT date 6/14/2000, provisional filing date of 6/14/1999. IDS filed 12/11/2001, 4/30/2002, and 3/22/2004.
2. This case is reopened. Claims 1-23, 29, 31, 33-35 pending. Claims 11-12, 16-23, 29, 31, 35 remain withdrawn from consideration. Claims 1-10, 13-15, 33-34 remain selected for examination of the merits. Claims 1, 9, 13, 14, 33, 34 are independent claims.

Allowable Subject Matter

3. **Claims 1-8, 13, 15** are allowed.
4. **Claim 10** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. **The claimed invention (as claimed in claim 14) is directed to non-statutory subject matter.**

In regard to independent claim 14, claim 14 claims in pertinent part “*A system comprising*,”. There does not appear to be anything within said claim directing said claim to hardware, therefore, said claim can be interpreted as software only (data structures), and is deemed non-statutory. It is noted that at least page 18 lines 13-17 of Applicant’s specification states that the invention can be implemented in an object oriented design, procedural, or any other design environment.

Claim Rejections - 35 USC § 103

6. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 9, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wanderski et al. (hereinafter Wanderski), U.S. Patent No. 6,519,617 issued February 2003, in view of Hull et al. (hereinafter Hull), U.S. Patent No. 6,687,404 issued February 2004.**

In regard to independent claim 9, Wanderski teaches creation of an XML “dialect” using dynamically selected transformations, comprising receiving a document (i.e. XML) and a DTD (Wanderski Abstract, column 4 lines 25-43). The XML document is parsed into a DOM tree of nodes which serves to map nodes to said XML document (Wanderski column 9 lines 9-12, column 7 lines 49-67). The DOM tree reflects a candidate path from node to node.

Wanderski alters (disambiguates) the DOM nodes accordingly (Wanderski column 11 lines 5-48). A new DTD is dynamically generated corresponding to the modified nodes of the DOM tree (Wanderski column 11 lines 59-67), therefore a new dialect of an XML document is created, so that when the new XML document is re-created, the new document is generated based upon instructions by the new DTD.

Wanderski teaches redundancy reduction and default attribute values comprising reducing redundant nodes of a DOM tree, as well as keeping count of the number of times a value occurs, so as to determine a “default” value (Wanderski column 13 lines 44-53, column 14 lines 4-11). Wanderski does not specifically teach selection based upon “scoring” of candidate paths. However, Hull teaches modeling of a document layout

structure (Hull Abstract), comprising analysis of a grammar parse tree utilizing a scoring of nodes (Hull at least column 30 lines 10-20). It is noted that Hull teaches DTDs can be included within the document (tree) analysis (Hull column 56 lines 52-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hull to Wanderski, providing Wanderski the benefit of document recognition on any document in a class of documents modeled by a grammar (or DTD) (Hull Abstract – bottom).

In regard to independent claim 14, claim 14 reflects the system comprising computer readable instructions used for performing the methods as claimed in claim 1, and is rejected along the same rationale.

8. **Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wanderski, in view of Yamakawa et al. (hereinafter Yamakawa), U.S. Patent No. 5,907,851 issued May 1999.**

In regard to independent claim 33, Wanderski discloses transformation (using software) for converting an XML document with DTD into a new transformed document reflective of an XML dialect (Wanderski column 4 lines 25-42). A plurality of DTDs are generated, as needed, so that a document (an output file) will conform to its new DTD accordingly (Wanderski column 11, lines 60-67). In this fashion, various documents are “disambiguated” via compliance with their respective (different) DTDs, changing all, or portions of documents as necessary.

Wanderski does not specifically teach providing a set of two or more DTDs, and selecting one for conversion. However, Yamakawa teaches document conversion utilizing preparation of a plurality of document type definitions (DTDs) for switching and development of one or more DTDs (Yamakawa column 22 lines 22-32, Figure 67). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Yamakawa to Wanderski, providing Wanderski the benefit of predefined DTD selection for eventual adherence to various established standards.

9. **Claim 34 is rejected under 35 U.S.C. 103(a) as being anticipated by Wanderski et al. (hereinafter Wanderski), U.S. Patent No. 6,519,617 issued February 2003.**

In regard to independent claim 34, Wanderski discloses transformation (using software) for converting an XML document with DTD into a new transformed document reflective of an XML dialect (Wanderski column 4 lines 25-42). A plurality of DTDs are generated, as needed, so that a document (an output file) will conform to its new DTD accordingly (Wanderski column 11, lines 60-67). In this fashion, various documents are “disambiguated” via compliance with their respective (different) DTDs.

Although Wanderski does not specifically teach a first and second portion, where only a first portion is disambiguated, nevertheless, since a typical document comprises a plurality of object portions, this limitation would have been obvious to one of ordinary skill in the art at the time of the invention, since it was known (and common) for the skilled artisan to modify only portions of a document, therefore allowing Wanderski to efficiently change all, or portions of documents as necessary.

Response to Arguments

10. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Bashore whose telephone number is (571) 272-4088. The examiner can normally be reached on 9:00 am - 5:30 pm EST.

Art Unit: 2176

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on (571) 272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**WILLIAM BASHORE
PRIMARY EXAMINER**

September 4, 2007